



Practitioner's Docket No. 1970-4

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Patent application

Inventor(s)

for

Title of invention

the specification of which is being transmitted herewith

OR

In re application of: LEE, Chien-Hsiung et al

Application No.: 10 / 716,323 Group No.:

Filed: November 18, 2003 Examiner:

For: PASSIVE ENERGY SAVING SYSTEM FOR A BUILDING

Assistant Commissioner for Patents  
Washington, D.C. 20231

**INFORMATION DISCLOSURE STATEMENT**

**CERTIFICATION UNDER 37 C.F.R. §§ 1.8(a) and 1.10\***  
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(Information Disclosure Statement [6-1]—page 1 of \_\_\_\_\_)

**NOTE:** "An information disclosure statement shall be considered by the Office if filed by the applicant:

- (1) Within three months of the filing date of a national application;
  - (2) Within three months of the date of entry of the national stage as set forth in § 1.491 in an international application; or
  - (3) Before the mailing date of a first Office action on the merits, whichever event occurs last."
- 37 C.F.R. § 1.97(b).

**NOTE:** "Each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in this section." 37 C.F.R. § 1.56(a).

"Individuals associated with the filing or prosecution of a patent application within the meaning of this section are:

- (1) each inventor named in the application;
- (2) each attorney or agent who prepares or prosecutes the application; and
- (3) every other person who is substantively involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application." 37 C.F.R. § 1.56(c).

**NOTE:** The "duty as described in § 1.56 will be met so long as the information in question was cited by the Office or submitted to the Office in the manner prescribed by §§ 1.97(b)-(d) and 1.98 before issuance of the patent." Notice of January 9, 1992, 1135 O.G. 13 -25 at 17.

**WARNING:** "No information disclosure statement may be filed in a provisional application." 37 C.F.R. § 1.51(b).

### List of Sections Forming Part of This Information Disclosure Statement

The following sections are being submitted for this Information Disclosure Statement:

(check sections forming a part of this statement: discard unused sections  
and number pages consecutively)

1. ☒ Preliminary Statements
2. ☒ FORMS PTO/SB/08A and 08B (formerly FORM PTO-1449)
3. ☐ Statement as to Information Not Found in Patents or Publications
4. ☐ Identification of Prior Application in Which Listed Information Was Already Cited and for Which No Copies Are Submitted or Need Be Submitted
5. ☐ Cumulative Patents or Publications
6. ☒ Copies of Listed Information Items Accompanying This Statement
7. ☐ Concise Explanation of Non-English Language Listed Information Items
  - 7A. ☐ EPO Search Report
  - 7B. ☐ English Language Version of EPO Search Report
8. ☐ Translation(s) of Non-English Language Documents
9. ☒ Concise Explanation of English Language Listed Information Items (Optional)
10. ☒ Identification of Person(s) Making This Information Disclosure Statement

(complete the following, if appropriate)

Sections \_\_\_\_\_, respectively, have been continued on ADDED PAGE(S).

**NOTE:** "Once the minimum requirements are met, the examiner has an obligation to consider the information." Notice of April 20, 1992 (1138 O.G. 37-41, 37).

## **Section 1. Preliminary statements**

Applicants submit herewith patents, publications or other information, of which they are aware that they believe may be material to the examination of this application, and in respect of which, there may be a duty to disclose.

The filing of this information disclosure statement shall not be construed as a representation that a search has been made (37 C.F.R. 1.97(g)), an admission that the information cited is, or is considered to be, material to patentability, or that no other material information exists.

The filing of this information disclosure statement shall not be construed as an admission against interest in any manner. Notice of January 9, 1992, 1135 O.G. 13-25, at 25.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:** Assistant Commissioner for Patents, Washington, DC 20231.

## Section 6. Copies of Listed Information Items Accompanying This Statement

NOTE: 37 C.F.R. 1.98(a)(2) requires that any information disclosure statement filed under § 1.97 shall include: "A legible copy of: (i) Each U.S. and foreign patent; (ii) Each publication or that portion which caused it to be listed; and (iii) All other information or that portion which caused it to be listed, except that no copy of a U.S. patent application need be included . . . ."

NOTE: The wording in § 1.98(a)(2)(iii) makes it clear that the requirement to submit a copy of each item of information listed in an information disclosure statement does not apply to the citation of a U.S. patent application. Notice of January 9, 1992, 1135 O.G. 13-25, at 14.

Legible copies of all items listed in Forms PTO/SB/08A and 08B (formerly Form PTO-1449) accompany this information statement.

*(complete the following, if applicable)*

- ☐ Exception(s) to above:
  - ☐ Items in prior application, from which an earlier filing date is claimed for this application, as identified in Section 4.
  - ☐ Cumulative patents or publications identified in Section 5.

## **Section 9. Concise Explanation of English Language Listed Information Items (OPTIONAL)**

**NOTE:** *"Applicants may, if they wish, provide a concise explanation of why English-language information is being submitted and how it is understood to be relevant. Concise explanations are helpful to the Office, particularly where documents are lengthy and complex and applicant is aware of a section that is highly relevant to patentability or where a large number of documents are submitted and applicant is aware that one or more are highly relevant to patentability." Notice of April 20, 1992 (1138 O.G. 37-41, 38).*

U.S. Patent Publication No. 2003/0037907, published on February 27, 2003 to Lee, discloses a solar energy heat exchanger that includes a heat pipe that directly heats flowing water in a supplied pipe. A solar collector plate collects solar energy in one part of the heat exchanger. A portion of the heat pipe is located in the solar collector plate. A second part of the heat pipe transfers heat to water in the supply pipe. A heating system is also described. The heating system includes a solar energy heat exchanger, a hot water reservoir, and a heater to distribute heat to a building. Optional supplemental energy sources and control units to regulate operation may also be used. The heat pipe in the heat exchanger may contain capillary tubes to circulate thermally conductive media within a closed heating manifold.

PCT Publication No. 9,625,632, published on August 22, 1996 to Quigley, teaches an air heating and heat recovery ventilation system that comprises one or more solar panels for absorbing and collecting energy from the sun during daylight hours, an energy processing unit for combining and distributing energy from different sources, a boiler which is interlinked to the system via the energy processing unit, an air distribution system and air handling unit which allows for heat to be distributed throughout a house via a network of conduits and a control means which provides a means for co-ordinating and controlling all the components and functions of the system. The solar panel has a solar radiation transmitting cover and a reflective base held in spaced apart relationship by side end members, a solar radiation absorber within the housing, inlet means enabling fluid to enter the absorber at one end of the housing, and outlet means enabling the fluid to exit from the absorber at an opposite end of the housing. The cover is

a sheet of glass, the underside of which has a "low E" coating. The cover may also be spaced apart from the solar radiation absorber and an air gap is provided between the cover and absorber.

U.S. Patent No. 4,934,338, issued on June 19, 1990 to Hollick et al., presents a system by which ventilation air for a building is preheated by providing on a south-facing wall a solar-energy absorbent collector panel with a plurality of air-inlet openings which communicate with air collection channels behind the panel. Outside air passing upwardly along the panel is heated by the heat of the panel which itself is heated by a combination of solar radiation and heat being lost from the interior of the building. The outside air, passing upwardly a short distance along the panel to the closest air inlet opening, is withdrawn therethrough into the air collection channel and expelled into the interior of the building.

U.S. Patent No. 4,373,573, issued on February 15, 1983 to Madwed, proposes a method and system for the passive solar energy induced storage and use of thermal energy at both high and low temperatures, comprising a collector communicating with the atmosphere for collecting air acting as a carrier for thermal energy, an underground thermal storage reservoir having a capacity sufficient to store thermal energy for substantially an entire heating or cooling season, and a solar chimney providing convection means for at least in part inducing the natural circulation of air from the atmosphere into the collector into and through the thermal storage reservoir, and outwardly from the reservoir back into the atmosphere, to transfer thermal energy between the collector and the reservoir.

**Section 10. Identification of Person(s) Making This Information Disclosure Statement**

The person making this statement is

*(check each applicable item)*

- (a) ☐ the inventor(s) who signs below

\_\_\_\_\_  
SIGNATURE OF INVENTOR

\_\_\_\_\_  
*(type name of inventor who is signing)*

- (b) ☐ an individual associated with the filing and prosecution of this application (37 C.F.R. § 1.56(c))

\_\_\_\_\_  
SIGNATURE OF INVENTOR

\_\_\_\_\_  
*(type name of inventor who is signing)*

- (c) ☒ the practitioner who signs below on the basis of the information:

*(check each applicable item)*

- ☐ supplied by the inventor(s).  
☐ supplied by an individual associated with the filing and prosecution of this application. (37 C.F.R. § 1.56(c))  
☒ in the practitioner's file.

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\_\_\_\_\_  
SIGNATURE OF PRACTITIONER

John S. Egbert

\_\_\_\_\_  
*(type or print name of practitioner)*

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